

REMARKS

Claims 4-6 and 8 are all the claims pending in the application. Previously claims 1-3, 7, 9, and 10, were canceled without prejudice or disclaimer. Reconsideration and allowance of all the claims are respectfully requested in view of the following remarks.

Claim Objections

- The Examiner objected to claims 4-6 and 8 as including informalities. Specifically, the Examiner asserted that the terms “innermost” and “outermost” are relative terms and that it is unclear how such terms apply to the damper. In response, Applicants have amended claims 4 and 8 to clarify that the outermost portions are disposed opposite one another across the thickness direction of the damper. Because the Examiner should expect that Applicants will amend the claims to cure the objections, this amendment should not present issues that would require further consideration and/or search. Therefore, Applicants respectfully request consideration of this amendment, even though it has been made after Final Office Action.

Claim Rejections - 35 U.S.C. § 102

- The Examiner rejected claims 4-6 and 8, under §102(b) as being anticipated by US Patent 5,329,970 to Squirrell (hereinafter Squirrell). Applicants respectfully traverse this rejection because Squirrell fails to disclose all of the elements as set forth in the claims.

Claims 4 and 8 set forth a damper system, for a gas turbine exhaust passage, comprising a damper made of an acoustically transmissive material, wherein the acoustically transmissive material is porous and is disposed from one outermost portion to the other outermost portion of the damper across a thickness direction of the damper.

As show in Fig. 3, for example, one embodiment consistent with that set forth in claims 4 and 8 includes a damper 9 made of porous plates 91 and a porous material 92. With this arrangement, the damping effect of an acoustic field within the exhaust passage is enhanced to make it possible to reduce resonance magnification. Hence, it is possible to suppress radiation of

the strong ultra low frequency noise generated in the gas turbine to the outside. See the specification at, for example: page 3, 3rd full paragraph, to page 4, last full paragraph; and page 5, 2nd and 3rd full paragraphs.

In contrast to that set forth in each of claims 4 and 8, Squirrell fails to disclose any particular material from which the damper is made, let alone that the material is porous. The Examiner asserts that the damper 10 includes vanes 16 that allow air to flow therethrough.¹ However, that air may flow through the vanes is due to the structure of the damper itself, not because the material from which it is made is porous. Accordingly, Squirrell fails to teach or suggest a damper made of an acoustically transmissive material, wherein the acoustically transmissive material is porous and is disposed from one outermost portion to the other outermost portion of the damper across a thickness direction of the damper, as independently set forth in claims 4 and 8.

For at least any of the above reasons, Squirrell fails to anticipate either one of claims 4 and 8. Likewise, this reference fails to anticipate dependent claims 5 and 6.

- The Examiner rejected claims 4-6 and 8, under §102(b) as being anticipated by US Patent 4,932,437 to Bachmann (hereinafter Bachmann). Applicants respectfully traverse this rejection because Bachmann fails to teach or suggest all the elements as set forth and arranged in the claims.

Again, claims 4 and 8 set forth a damper system, for a gas turbine exhaust passage, comprising a damper made of an acoustically transmissive material, wherein the acoustically transmissive material is porous and is disposed from one outermost portion to the other outermost portion of the damper across a thickness direction of the damper.

¹ Office Action at page 2, last line to page 3, line 5.

The Examiner asserts that Bachmann discloses a damper that is porous in a radial direction of the damper due to holes 40 formed in side wall 38.² Even assuming that the side wall 38 may be called porous, the remainder of the blade 17 is made from “metal stock” and is not porous.³ Accordingly, Bachmann fails to teach or suggest an acoustically transmissive material that is porous and is disposed from one outermost portion to the other outermost portion of the damper across a thickness direction of the damper, as independently set forth in claims 4 and 8.

For at least any of the above reasons, Bachmann fails to anticipate claims 4 and 8. Likewise, this reference fails to anticipate dependent claims 5 and 6.

- The Examiner rejected claims 4-6 and 8, under §102(b) as being anticipated by US Patent 6,050,084 to Schütz et al. (hereinafter Schütz). Applicants respectfully traverse this rejection because Schütz fails to teach or suggest all the elements as set forth and arranged in the claims.

Again, claims 4 and 8 set forth a damper system, for a gas turbine exhaust passage, comprising a damper made of an acoustically transmissive material, wherein the acoustically transmissive material is porous and is disposed from one outermost portion to the other outermost portion of the damper across a thickness direction of the damper.

The Examiner asserts that Schütz discloses a damper that is porous along its length due to the orientation of wool/fabric mats 72 [read 74] or the cooling channels that communicate with cooling holes 60.⁴ Even assuming that the fabric mats 74 and holes 60 can be called a porous material, cover plates 72 still are made of chromium steel, are disposed on the outer most portions of the damper in its thickness direction, and are not porous.⁵ Accordingly, Schütz fails

² Office Action at page 3, item 4, lines 6-11.

³ Bachmann at col. 1, lines 35-41.

⁴ Office action at page 4, item 5, lines 6-11.

⁵ Schütz at col. 6, lines 32-44.

to teach or suggest an acoustically transmissive material that is porous and is disposed from one outermost portion to the other outermost portion of the damper across a thickness direction of the damper, as independently set forth in claims 4 and 8.

For at least any of the above reasons, Schütz fails to anticipate claims 4 and 8. Likewise, this reference fails to anticipate dependent claims 5 and 6.

Claim Rejections - 35 U.S.C. § 103

The Examiner rejected claims 4-6 and 8 under §103(a) as being unpatentable over each one of Squirrell, Bachmann, and Schütz. Applicants traverse each of these rejections because the Examiner has failed to establish *prima facie* obviousness.

First, Applicants' argument regarding the Examiner's failure procedurally to set forth *prima facie* obviousness as set forth in the previous response is still pertinent and, therefore, is incorporated herein by reference.⁶

Second, the Examiner's interpretation of MPEP §2112 is mistaken. The Examiner argues that it is proper to use rejections under both §102 and §103 when the rejection is based on "inherency". Although this may be true in a broad sense, it still does not excuse the Examiner from applying the well-settled *Graham v. Deere*² factors for making a rejection under §103 "in each and every case." See MPEP § 2141, section entitled STANDARD OF PATENTABILITY TO BE APPLIED IN OBVIOUSNESS REJECTIONS (emphasis in original). Accordingly, the Examiner must ascertain the differences between the prior art and the claims in issue. This, the Examiner has failed to do in the present case. Accordingly, the Examiner's rejections under §103 are improper.

⁶ Amendment filed July 15, 2004 at pages 5-6.

² *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966).

Third, for the sake of argument alone, even assuming that the Examiner's rejections under §103(a) procedurally were proper, each of the references still fails to teach or suggest all the elements as set forth and arranged in the claims.

As noted above with respect to the rejections under §102, each of the references fails to disclose a damper made of an acoustically transmissive material, wherein the acoustically transmissive material is porous and is disposed from one outermost portion to the other outermost portion of the damper across a thickness direction of the damper, as set forth in each of claims 4 and 8. Further, the Examiner provides no motivation, or reasoning, for modifying any one of the references so as to include such an element. Accordingly, each one of Squirrell, Bachmann, and Schütz fails to render obvious claims 4 and 8. Likewise, each of these references fails to render obvious dependent claims 5 and 6.

For at least any of the above reasons, the Examiner's rejections under §103 as based on each one of Squirrell, Bachmann, and Schütz, are deficient and should be withdrawn.

Conclusion


In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment Under 37 C.F.R. § 1.116
US Appln. 10/717,477

Atty. Docket: Q78517

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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